

The invention claimed is:

1. A convertible roof system comprising:

a front hard-top roof section movable from a closed position to an open position;

a rear hard-top roof section movable from a closed position to an open position;

a peripheral roof structure provided on at least one of the hard-top roof sections, the peripheral roof structure having an inner roof panel, an outer roof panel and a joining section, the inner and outer roof panels contact each other and are permanently joined together at the joining section, the peripheral roof structure further including peripheral edge flanges which have a diverging orientation;

a weatherstrip secured to one of the peripheral flanges; and

an interior trim fastener secured to another of the peripheral flanges.

2. The system of Claim 1 wherein the weatherstrip comprises a substantially U-shaped carrier and a first bulb, the carrier being attached to the corresponding peripheral flange.

3. The system of Claim 2 wherein the weatherstrip further comprises a second bulb coupled to the carrier.

4. The system of Claim 3 wherein the weatherstrip further comprises a bridging section connecting at least one of the bulbs to the carrier, the bulbs being spaced apart from each other and the area between the bulbs acting as a water drain trough.

5. The system of Claim 1 wherein the weatherstrip further comprises at least a pair of spaced apart bulbs, the portion of the weatherstrip between the bulbs acting as a water drain trough.

6. The system of Claim 5 wherein the bulbs are substantially hollow and flexible.

7. The system of Claim 1 further comprising a headliner attached to the front roof section by the interior trim fastener.

8. The system of Claim 7 wherein the headliner includes a pre-formed, resonated foam, substrate.

9. The system of Claim 7 wherein the headliner includes a pre-formed, resonated fiberglass, substrate.

10. The system of Claim 1 wherein the front and rear roof sections are stowed in a substantially vertical and nested orientation when in their open positions.

11. The system of Claim 1 wherein the weatherstrip seals between the front and rear roof sections when the roof sections are in their closed positions.

12. A convertible roof system comprising:
a first roof section movable from a raised position to a stowed position, the first roof section having a single-thickness peripheral flange; and
a weatherstrip including at least a carrier, a first bulb and a second bulb, the carrier being secured to at least opposite faces of the single-thickness peripheral flange.

13. The system of Claim 12 wherein the first roof section is a first hard-top roof section.

14. The system of Claim 13 further comprising a second hard-top roof section movable from a raised position, adjacent the first roof section, to a stowed position.

15. The system of Claim 12 wherein the first roof section further comprises a second peripheral flange spaced apart from the single-thickness peripheral flange.

16. The system of Claim 15 further comprising an interior trim fastener secured to the second peripheral flange.

17. The system of Claim 15 wherein the roof section further comprises an outer roof panel and an inner roof panel, the roof panels are permanently joined together at a joint area inboard of the peripheral flanges.

18. The system of Claim 12 wherein the first roof section is located in a substantially vertical orientation below a vehicular beltline when in its stowed position.

19. The system of Claim 12 wherein the weatherstrip extends in a substantially cross-car direction along a rear portion of the roof section when viewed in its raised position.

20. The system of Claim 12 wherein the weatherstrip further comprises a living hinge located in a bridging segment between the bulbs, the bulbs being spaced apart from each other, the bridging segment being a unitary and homogeneous type of flexible material.

21. A convertible roof weatherstrip comprising:
a substantially U-shaped carrier;
a flexible bulb projecting from the carrier;
a second flexible bulb; and
a bridge connecting the second bulb to the carrier and spacing apart the bulbs from each other.

22. The weatherstrip of Claim 21 further comprising a reduced thickness, living hinge located in the bridge.

23. The weatherstrip of Claim 21 further comprising a metallic insert encapsulated only within the carrier and the bridge being free of the metallic insert.

24. The weatherstrip of Claim 21 wherein the weatherstrip is adapted for use along a cross-car section of a retractable, hard-top roof section.

25. An automotive convertible roof apparatus comprising a first retractable hard-top external roof panel and an internal roof panel permanently joined to the external roof panel at a joint, each of the roof panels having a peripheral flange which diverge from each other outboard of the joint.

26. The apparatus of Claim 25 further comprising a retractable second hard-top external roof panel located adjacent the first external roof panel when both are in their raised positions, the external roof panels being retractable to substantially vertical orientations.

27. The apparatus of Claim 25 further comprising a weatherstrip mounted to one of the flanges and a trim fastener coupled to the other of the flanges.

28. A method of assembling a convertible roof having a retractable first roof section, a retractable second roof section, and a weatherstrip, at least one of the roof sections having an inner roof panel and an outer roof panel, the method comprising:

- (a) welding together the inner and outer roof panels at a joint;
- (b) pushing a carrier of the weatherstrip onto a single thickness flange of one of the roof panels;
- (c) flexing a drain trough of the weatherstrip which bridges between at least two hollow bulbs of the weatherstrip;
- (d) compressing the hollow bulbs of the weatherstrip between the first and second roof sections; and
- (e) allowing the first and second roof sections to automatically retract.

29. The method of Claim 28 further comprising spacing a second peripheral flange of one of the roof panels away from the single thickness flange outboard of the panel joint and attaching a component to the second flange.